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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,205	04/28/2000	Peter V. Boesen, M.D.	P04425US0	3361

7590

02/13/2004

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Des Moines, IA 50309

EXAMINER
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NASSER, ROBERT L

ART UNIT	PAPER NUMBER
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3736

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DATE MAILED: 02/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/560,205

Applicant(s)

BOESEN, M.D., PETER V.

Examiner

Robert L. Nasser

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 10-17 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-17 and 32-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

The examiner deeply regrets that in performing an update search, the Wilk reference was discovered and is pertinent to the claims. As such, the following new rejection is being applied to the claims, including previously allowed claim 15.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-7, 10-14, 16, 17, 32, 33, and 35 are rejected under 35

U.S.C. 103(a) as being obvious over Wilk in view of Callahan et al. In figures 8 and 9, Wilk shows a device including a housing 202 that contains an acoustic transducer 206 for measuring heart and/or lung sounds, a transmitter 216 in communication with the transducer 206, which broadcasts a signal that is modulated by the transducer output, a display 232 secured to the housing for displaying a representation of the transducer output. The housing is capable of being selectively placed at various locations on the body. Wilk has a memory at the receiver location for storing original acoustic signals, but not in the housing. Callahan further teaches storing the acoustic signals in a memory 160 located in the housing containing the transducer for later retrieval and/or comparison. Hence, it would have been obvious to modify Wilk to use such a memory, to allow the on site physician better access to patient data. The examiner notes that there is a receiver 222 that receives the signal from transmitter 216, with a computer 248 connected to the receiver. Claims 5 and 6 are rejected in that although Wilk is

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silent as to the structure of the acoustic transducer, Callahan teaches a transducer for the identical purpose that is a bell with a diaphragm. Hence, it would have been obvious to modify Wilk to use such transducer, as it is merely the substitution of one known equivalent transducer for another. Claim 7 is rejected in that a sound sensor is a blood pressure transducer in a korotkoff sound method, e.g. it indicates systolic and diastolic pressure based on sound signals. Claims 10-14 are rejected in that the combination also teaches the method. Claims 16 and 17 are rejected in that the signal will attenuate, e.g. reduce in amplitude over any distance. With respect to claims 35, the signal will reduce to a negligible level over a predetermines distance, for example, 100 miles.

Claims 4 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilk in view of Callahan et al as applied to claims 1-3, 5-7, 10-14, 16, 17, 32, 33, and 35 above, and further in view of Fruscello. Fruscello further teaches that it is known in acoustic monitoring devices to include a temperature sensor to sense skin temperature. Therefore, it would have been obvious to modify the above combination to use a temperature sensor, to provide the physician with a more complete picture of the patient's condition.

Claims 4 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilk in view of Callahan et al as applied to claims 1-3, 5-7, 10-14, 16, 17, 32, 33, and 35 above, and further in view of Eisenberg et al. Wilk teaches that it can be used to measure heart or lung or cardiovascular sounds. Eisenberg shows an identical device and teaches that it can also be used to measure bowel sounds. Hence, it would have

been obvious to modify the above combination to measure bowel sounds, as it is merely using the device for an alternate well known use in the art.

Applicant's arguments filed 11/24/2003 have been fully considered but they are deemed moot in view of the new grounds of rejection.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

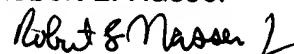
Malilay shows a similar stethoscope to the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser whose telephone number is (703) 308-3251. The examiner can normally be reached on Mon-Fri, variable hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert L. Nasser



ROBERT L. NASSER  
PATENT EXAMINER